

This listing of claims will replace all prior versions and listings of the claims in this application:

Claims 1-20 (cancelled)

Claim 21 (previously presented) A method of removing contaminants from a container in a vehicle, said method comprising the steps of:

determining a flow direction of a first fluid through a container on a vehicle, which container is configured to facilitate heat transfer from the first fluid to a second fluid;

where said container has an inlet end and an outlet end and during operation of the vehicle, the first fluid flows only in one direction, which is from the inlet end to the outlet end;

coupling a filter system to the container;

pumping the first fluid in a primary cleaning flow direction;

reversing a flow of said first fluid through said container;

resuming flow of the first fluid in said primary cleaning flow direction at a time within a predetermined reversal interval from when said step of reversing a flow is commenced;

wherein said predetermined reversal interval is less than 10 seconds; and,

repeating said steps of reversing and resuming such that said first fluid flows in a reverse direction for a cumulative reverse direction duration for no more than ten

percent of a cumulative primary cleaning direction duration of first fluid flowing in said primary cleaning direction.

Claim 22 (previously presented) A method of claim 21 wherein said predetermined reversal interval is less than one second; and,

said step of reversing a flow is accomplished with a compressed fluid;

Claim 23 (previously presented) A method of claim 22 wherein said compressed fluid is compressed air.

Claim 24 (cancelled)

Claim 25 (previously presented) A method of claim 21 wherein said first fluid is transmission fluid; and,

said container is a transmission fluid cooler.

Claim 26 (cancelled)

Claim 27 (previously presented) A method of claim 25 wherein said second fluid is a fluid circulated around components of an engine of said vehicle.

Claim 28 (previously presented) A method of claim 27 wherein said second fluid further is an engine coolant.

Claim 29 (previously presented) A method of claim 22 wherein said step of reversing a flow is accomplished through a compressed fluid used to actuate a compressed fluid driven valve.

Claim 30 (previously presented) A method of claim 29 wherein said compressed fluid driven valve causes said step of pumping said first fluid to reverse a flow direction through said container.

Claim 31 (previously presented) A method of claim 22 further comprising the step of filtering said first fluid during said step of pumping the first fluid in a primary cleaning flow direction.

Claim 32 (currently amended) A method of claim 31 wherein said step of filtering said first fluid is performed by a 28-micron filter.

Claim 33 (previously presented) A method of claim 32 wherein a direction of flow of said first fluid through said filter is constant.

Claim 34 (previously presented) A method of removing matter from a reservoir in a vehicle, said method comprising the steps of:

providing a reservoir on a vehicle, which reservoir is configured to contain a first fluid which, with the aid of a pump, flows to a plurality of positions within said vehicle;

wherein, during operation of the vehicle, the first fluid flows only in one direction, between said plurality of positions;

coupling a filter system to receive said first fluid;

pumping the first fluid in a first flow direction;

stopping a flow of said first fluid in said first flow direction;

resuming flow of the first fluid in said first flow direction at a time within a predetermined interval;

wherein said predetermined interval is less than ten (10) seconds; and,

wherein a compressed second fluid is used in accomplishing said step of stopping a flow of said first fluid.

Claim 35 (previously presented) A method of claim 34 wherein said step of stopping a flow of said first fluid is an inherent step in reversing a flow of said first fluid.

Claim 36 (previously presented) A method of claim 35 wherein said compressed second fluid is used to actuate a compressed fluid driven valve.

Claim 37 (previously presented) A method of claim 34 wherein said compressed second fluid is used to actuate a compressed fluid driven valve.

Claim 38 (previously presented) A method of claim 34 wherein said compressed second fluid is compressed air.

Claim 39 (previously presented) A method of claim 34 wherein said predetermined interval is less than five (5) seconds.

Claim 40 (previously presented) A method of claim 39 wherein said predetermined interval is less than two (2) seconds.

Claim 41 (previously presented) A method of claim 40 wherein said predetermined interval is less than one (1) second.

Claim 42 (previously presented) A method of claim 34 wherein said first fluid is transmission fluid.

Claim 43 (previously presented) A method of removing contaminants from transmission fluid in a vehicle, comprising the steps of:

providing a transmission cooler for exchanging heat between transmission fluid and engine coolant;

pumping said transmission fluid from said transmission cooler through a filter to remove contaminants and returning said transmission fluid to said transmission cooler;

temporarily stopping flow of said transmission fluid through said transmission cooler with the aid of compressed air; and

resuming flow of said transmission fluid through said transmission cooler after an interval of less than ten (10) seconds.

Claim 44 (previously presented) A method of claim 43 wherein said step of temporarily stopping flow of said transmission fluid is an inherent step in reversing said flow of said transmission fluid through said transmission cooler.

Claim 45 (previously presented) A method of claim 43 wherein a direction of flow of said transmission fluid remains constant despite said step of temporarily stopping flow of said transmission fluid.

Claim 46 (previously presented) A method of claim 44 wherein a direction of flow of said transmission fluid remains constant despite reversing said flow of said transmission fluid through said transmission cooler.